(19) World Intellectual Property Organization International Bureau



(43) International Publication Date 4 November 2004 (04.11.2004)

PCT

(10) International Publication Number WO 2004/094766 A3

(51) International Patent Classification⁷: E21B 23/01

(21) International Application Number:

PCT/US2004/011973

(22) International Filing Date: 15 April 2004 (15.04.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/463,586

17 April 2003 (17.04.2003) US

(71) Applicant (for all designated States except US): ENVENTURE GLOBAL TECHNOLOGY [US/US]; 16200 A. Park Row, Houston, TX 77084 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): BRISCO, David, Paul [US/US]; 405 Westridge Drive, Duncan, OK 73533 (US). WATSON, Brock, Wayne [US/US]; 2535 Marsh Lane #1004. Carrollton, TX 75006 (US). TREECE, Harold [US/US]; 213 Ridgecrest Drive, Duncan, OK 73533 (US).

(74) Agent: MATTINGLY, Todd; Haynes and Boone, LLP, 901 Main Street, Suite 3100, Dallas, TX 75202 (US).

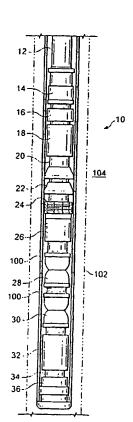
(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, HL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW,

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),

[Continued on next page]

(54) Title: APPARATUS FOR RADIALLY EXPANDING AND PLASTICALLY DEFORMING A TUBULAR MEMBER

(57) Abstract: An apparatus for radially expanding and plastically deforming a tubular (100).



BEST AVAILABLE COPY

International application No. INTERNATIONAL SEARCH REPORT PCT/US04/11973 CLASSIFICATION OF SUBJECT MATTER IPC(7) : E21B 23/01 US CL : 166/298, 55.7 According to International Patent Classification (IPC) or to both national classification and IPC FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) U.S.: 166/298, 55.755, 55.6, 297; 405/184.3 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) DOCUMENTS CONSIDERED TO BE RELEVANT Citation of document, with indication, where appropriate, of the relevant passages Category * Relevant to claim No. US 5,306,101 A (Rockower et al.) 26 April 1994 (26.04.1994), sec entire document. 1, 13, 26 and 41 US 6,325,148 BI (Trahan et al.) 4 December 2001 (04.12.2001), see entire document. Х 50, 59-67, 70 and 72 P,X US 6,598,678 B1 (Simpson et al.) 29 July 2003 (29.07.2003), see entire document. 1-75 Further documents are listed in the continuation of Box C. See patent family annex. Special categories of cited documents: later document published after the international filing date or priority date and not in conflict with the application but cited to understand the document defining the general state of the art which is not considered to be of principle or theory underlying the invention "X" earlier application or patent published on or after the international filing date document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being document referring to an oral disclosure, use, exhibition or other means obvious to a person skilled in the art document published prior to the international filing date but later than the "&" document member of the same patent family priority date claimed Date of the actual completion of the international search Date of mailing of the international search report 18 August 2005 (18.08.2005) Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Telephone No. 571-272-3600 Facsimile No. (703) 305-3230 Form PCT/ISA/210 (second sheet) (January 2004)